

# PROGRESS IN 1976 AND PLANS FOR 1977

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## INTRODUCTION

Two major topics of interest to all of us are the work accomplished by the Indiana State Highway Commission during the last year and the commission's plans for 1977.

I am new to the highway commission, but I am proud to be a part of this organization. What they have accomplished during the past year was done by others, so I can brag and still be my modest self.

## ISHC ACCOMPLISHMENTS—1976

### *40 Miles of Interstate Opened*

The Indiana State Highway Commission has much about which to be proud. In the past year, with a budget about the same as it has had for the last 10 years, the commission opened to traffic all of its main-line interstate system. Thanks to a program initiated by former chairman Richard A. Boehning and Governor Otis R. Bowen, the interstate highway system in Indiana was able to move ahead more quickly than federal funds would ever allow. Opening these new and safer facilities has saved lives because our interstates are by far our safest highways. Early opening has saved time and energy because of the nonstop driving. Early opening has saved money because construction costs have and probably will continue to skyrocket.

This year Indiana's 3.3 mi. of I-275, which is a part of the Cincinnati circum-urban route, will be opened. In 1968 Congress added to the interstate program about 14 mi. of additional interstate, I-164, joining Evansville and I-64. We have asked for several other additions but so far have not had approval for those sections.

### *Eight Bridges and 70 Miles of New Roads Built*

Besides the 40 mi. of interstate opened last year, Indiana saw the completion of eight new bridges and another 70-plus mi. of other new state roads.

### *Most Killer Highways Under Contract*

All of the originally designated "killer highways" to be replaced with the 1969 two-cent gas tax were put under contract except for a few miles of SR 63/41 that were tied up in court.

### *Forgiving Highways, Crash Cushions, Striping, Median Barriers*

These new roads and bridges were built with the latest safety and design features. The state highway commission is building what we call "forgiving highways." These are roads that allow the driver room for error—a chance to recover. These highways have recovery areas on the shoulders and the median. Roadside obstacles are eliminated or protected with guard rail or crash cushions or replaced with breakaway supports and signs. A concrete median barrier has been installed to guide the motorists back on to the lane and keep them from crossing into oncoming traffic. Everything possible is done to make these highways as safe as they can be.

Other work is being done all over the state to upgrade existing highways. Paint lines are renewed regularly and, in high traffic areas, plastic edge and center lines are used extensively. Crash cushions were installed during the last year in about 30 locations in the state, providing protection of some 50 roadside obstacles and are already credited with saving lives.

### *High Mast Lighting*

High mast lighting was installed on the innerbelt to provide maximum light with as few poles as possible. Lighting was also installed at other locations to provide help to the motorist.

### *Research—Monitors for Preventing Rear Collisions*

As part of a research project to study ways to help reduce the number of rear-end collisions caused by following too closely, monitors were installed on SR 431 in Indianapolis, and another pair is in operation near Terre Haute.

I could list many more safety achievements, but these illustrate the high priority placed on safety by Governor Bowen and Executive Director Roger F. Marsh.

### *Skid Resistant Surfaces*

The highway commission has been a leader in the careful control of pavement traction with the use of skid testing equipment headquartered here in West Lafayette at the Research and Training

Center. Skid resistant overlays and surfaces are used to provide a high amount of traction.

### *Segmental Bridges*

The commission's bridge design department has set the pace with the first segmental bridge in the Midwest, opened last year near North Vernon over the Vernon Fork of the Muscatatuck River. This is also only the second of this type of bridge in the United States, and many other states are using the concept now. We have several more under construction or planned in Indiana. This prestressed, concrete, segmental box-girder bridge is a bridge of the future, providing us many savings in its construction. We foresee the bridges as requiring a minimum of future maintenance.

### *Relocation of Cline Avenue*

Congressman Ray Madden, Senator Birch Bayh, Congressman Adam Benjamin and other congressional leaders have been able to include in the federal highway budget one of the most expensive jobs the highway commission has ever undertaken and then have worked continuously to keep that project moving—that project is the relocation of Cline Avenue/SR 912 in the heart of Lake County. This 4.4 mi. reconstruction is badly needed in this heavily-traveled area and includes about 17 ramps and bridges as well as detailed utility and railroad relocation. The first construction contract for phase one was begun last fall. The project will be funded 90% with federal urban/high density funds.

## ISHC BUDGET PROBLEMS

In this busy year, the highway commission accomplished many, many major goals. At the same time, the budget was about the same as it was 10 years ago—see Figure 1. The budget is at this level because highway, road, and street construction and maintenance in Indiana is paid for by the highway user through a gallonage-based gasoline tax.

### *Gasoline Sales Not Increasing*

This income is divided between the state highway commission and the city and county governments, as most of you here well know, so we are all suffering this budget problem. With the increase in fuel-efficient automobiles and the awareness of the energy shortage and more efficient driving techniques, the increase in gallonage sales of gasoline has not continued.

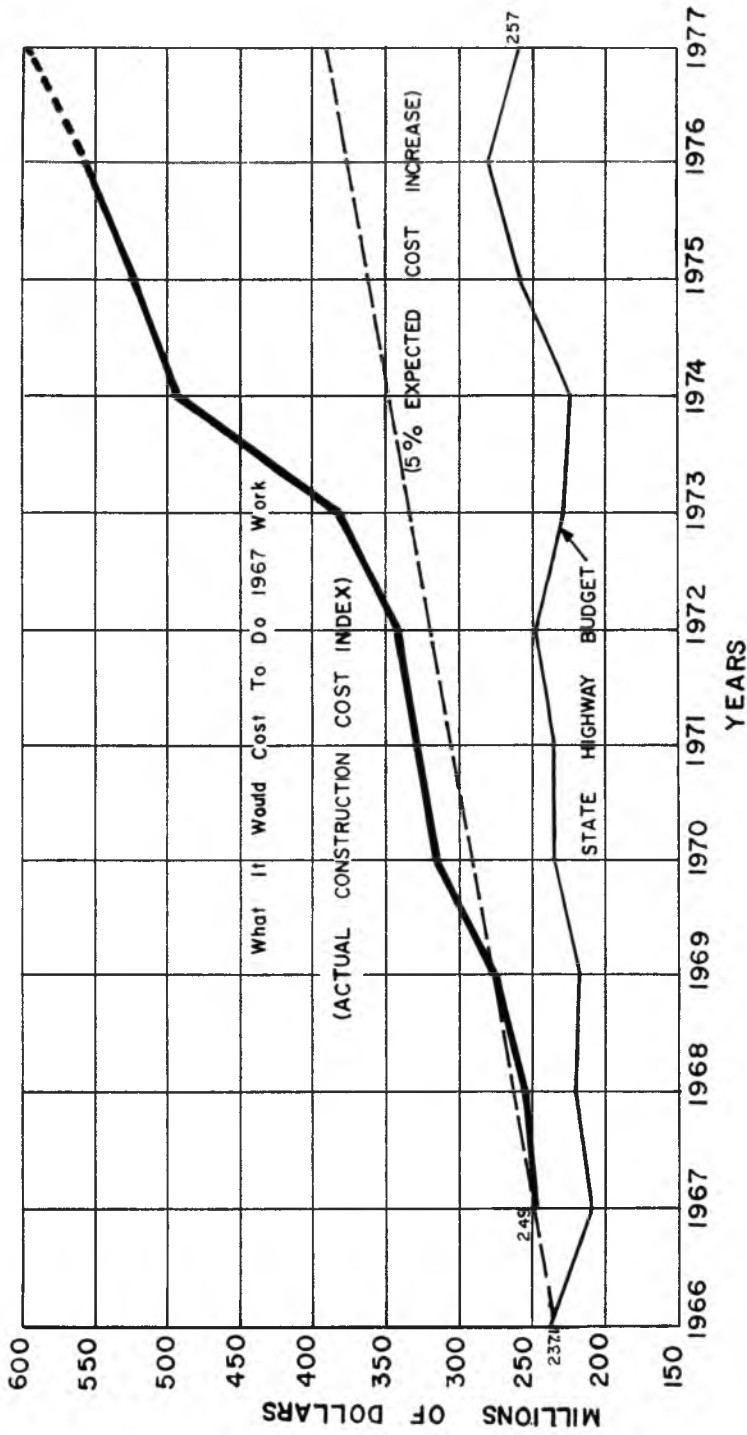


Figure 1. ISHC Budget Versus Inflation

### *Highway Costs Up*

The legislature last year recognized the problem and asked the Transportation Advisory Commission (TAC) for a two-year study of the transportation picture in Indiana. Last year the TAC studied highway transportation. At a series of public hearings all over the state, the state highway commission and local governmental agencies concerned with road and street construction and maintenance testified to the increasing costs involved in every facet of road construction and maintenance and the increasing demands on every system.

### *Gap Between Income and Costs Increasing*

The TAC came up with a very grim picture. Figure 2 illustrates the average annual need and income projections over the next 10 years in Indiana. The dashed lines are income projections. The dashed line (marked A) shows the projected income from the gallonage tax, left as it is right now. The line stays fairly straight with an income to the state—including city, county, and state governments—at about \$400 million.

The dashed line (B) shows what the income would be with a straight 4.75 cent-a-gallon increase. The solid line (C) shows what the income would be with an ad valorem, or value based, tax replacing the eight-cent per gallon tax. The ad valorem tax, because it is based on value and the cost of gasoline, is expected to increase; it increases at about the same rate as the increased costs and needs as illustrated by the solid lines.

The solid line (D) indicates what TAC saw as the amount needed in Indiana to keep the state's road and highway system in the condition it is in today without further deterioration. The solid line (E) indicates the intermediate needs. This would keep the system from deterioration and at the same time meet some of the highest priority demands for improvements.

The solid line (F) shows the real needs or the amount of money needed to develop a highway and street network in Indiana that is adequate to handle the needs of the future and meet the national standards of capacity and safety.

In spite of the fact that TAC voted unanimously that the intermediate needs, at the very least, should be met, the proposal now under consideration would not even bring us up to the minimum needs level. The main goal of the legislation is to have about \$150 million more by 1978. This, in whatever combination is decided upon, would come close to the minimum needs, but would not allow for increases

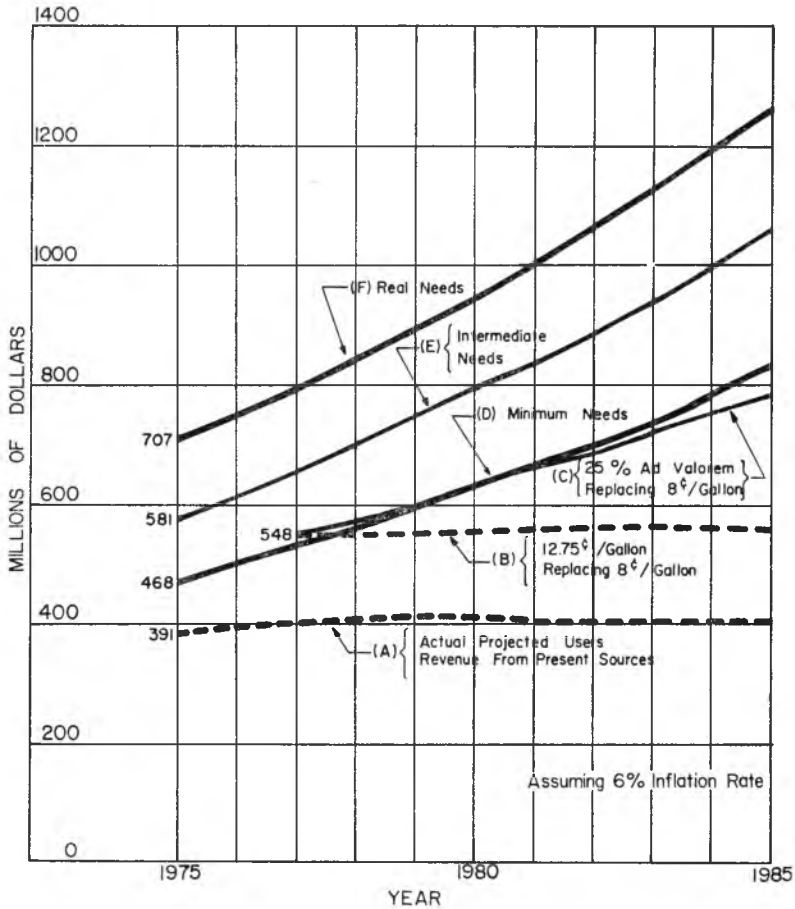


Figure 2. TAC Statewide Projections—Average Annual Need and User Responsibility

due to inflation. Current legislation would split this 50/50 between state and local governments.

#### *Work and Personnel Cutbacks*

What does this mean to the future of the highway program in Indiana? Unfortunately, the chart pretty well tells the story. I would like to say that we could cut back in several areas, but we have already done that.

We have cut back on mowing from four cycles to three and will limit that even more if weather allows. We mow only from ditch-line to ditch-line instead of from fence-line to fence-line. We have cut back

50% on our litter pick-up on the total system and on spot litter pick-up, too.

We have instituted a maintenance management program that insures that no time or manpower is wasted by setting standards for maintenance procedures to be followed by employees all over the state.

We have increased our patching because lack of funding has forced us to reduce resurfacing to less than half the recommended amount. For over 10 years we have been doing less than half the recommended resurfacing—see Figure 3. We have about 900 fewer employees than we had ten years ago.

### *Bridge Reconstruction Slowed*

We are only doing one-third of the bridge reconstructions that experts recommend to keep our system up to standards. We are only doing 40 new bridges each year and experts recommend we should be doing 60 more to keep bridges in top shape—see Figures 4 and 5.

We have almost 4,800 bridges on the state system—517 of these were built before 1926 and have passed their life expectancy. We have 90 bridges with posted load limits that should be replaced—13 have limits of five tons or less; 38 have a 6 to 10 ton limit; and 39 have an 11 to 15 ton limit. Ninety-three bridges on the system are one lane with a road clearance of 18 ft. or less; 44 two-lane bridges have a horizontal clearance of less than 30 ft.

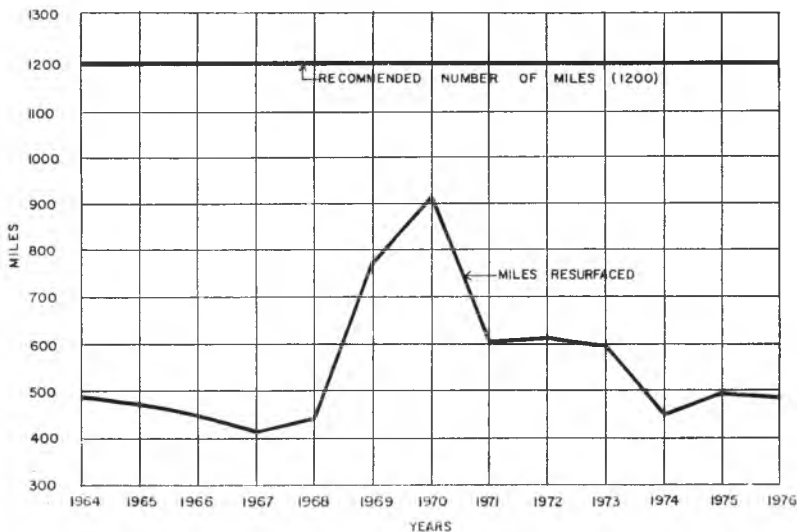
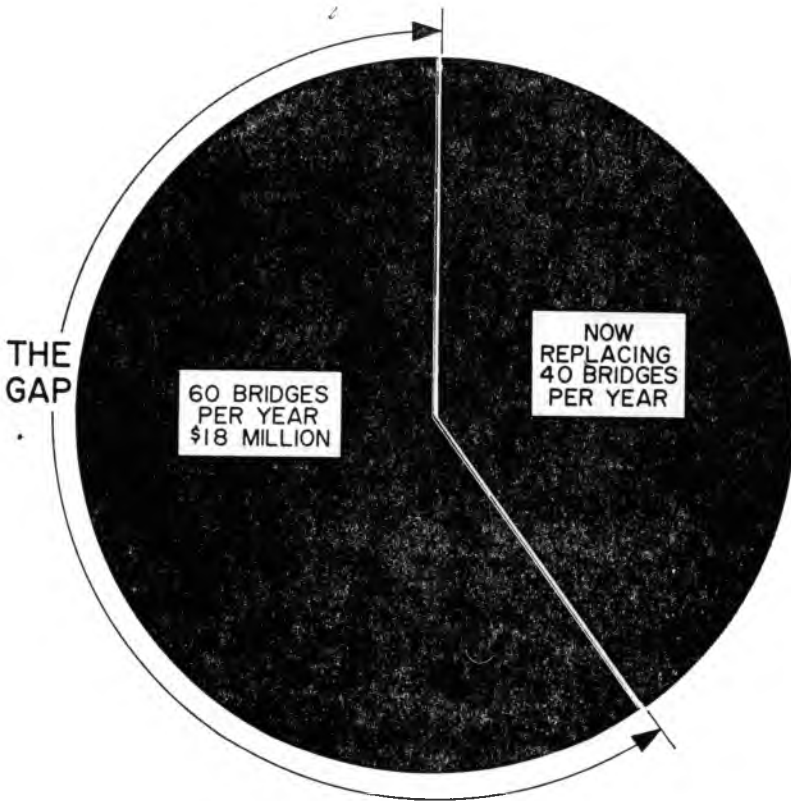


Figure 3. ISHC Resurface Program



**Figure 4. Bridge Replacement Needs—4800 State Highway Bridges**

Over 106 miles of Indiana's interstates were opened to traffic in 1966 so that means more than 10% of that network is over 10 years old now. Every county and city here can say the same thing, on a smaller scale, I am sure.

### SUMMARY OF WORK ACCOMPLISHED

Last year we accomplished a lot of work. We awarded over \$130 million worth of contracts. A lot, yes, but still the lowest awards total in more than a decade and 41% less than the amount of contracts awarded in 1975. In the same 10-year period, inflation has more than doubled the costs, so the amount of real work accomplished for the money is even less. As a result, we were unable to add any new road projects in the 1976 Capital Improvement Program and, if there is not an unexpected change in the funding, we will not see any new projects in the 1977 CIP, either.



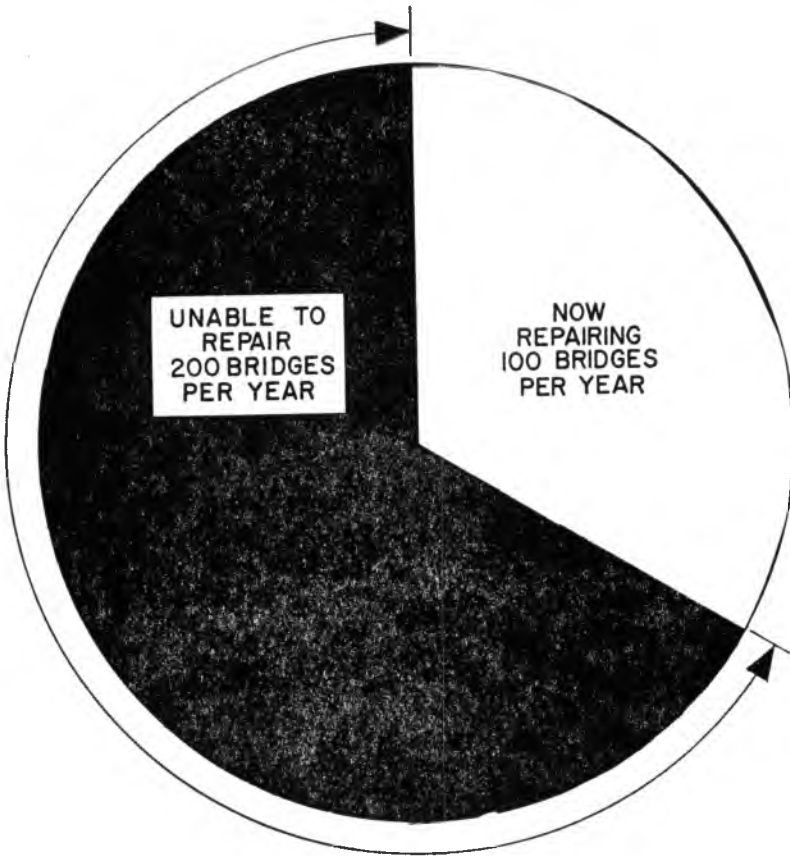


Figure 5. Bridge Repair—4800 State Highway Bridges—Should Be Repairing 300 Bridges Per Year

## FUTURE PLANS

### *First Priority—Maintenance*

Instead, we have had to reassess our priorities. Our future plans for 1977 are based on this priority list. First priority is the maintenance of existing highways. This means that keeping the roads and streets in Indiana from deteriorating is our major concern.

### *Second Priority—Improvement of Existing Roads*

Second priority has become the improvement of existing roads. This includes adding traffic lanes, modifying intersections, adding interchanges, widening bridges, and building new railroad grade separations.

*Third Priority—New Routes*

Third priority has become new routes—badly needed bypasses, reservoir access roads, and economic development roads.

*97 Million Dollars—Shortfall*

These are the plans for 1977 as nearly as I can read them no matter what decision the legislature makes on funding. There is a \$32 million shortfall between our 1978 budget request and the funds necessary to provide a level of service comparable to 1974. This shortfall, along with the \$65 million requested for additional maintenance, adds up to a total shortage of \$97 million of revenue for the state highway commission.

**CONCLUSION**

You and I are aware of the needs, the future projects, the funding problems, but we can only offer the Hoosier motorist the level of service he is willing to pay for. If I may paraphrase Larry Wallace, Public Service Commission director and TAC member, the money now available for highway construction and maintenance will provide roads suitable for all-terrain vehicles and not much else. If we really want to drive luxury cars and have smooth, adequate highways in the future, it is going to take a long hard look and some major, drastic changes in funding.

For now, we can only struggle to protect the Indiana motorist's over \$8 billion investment in his highway system. I am proud to be a part of that struggle, because I believe it is a cause worth fighting for. Our roads, streets, and highways are basic to the American way of life, to our standard of living. Daily, our lives depend on our highways.